

## DRAWINGS ATTACHED

1 310 357

- (21) Application No. 36259/69 (22) Filed 18 July 1969  
 (23) Complete Specification filed 17 July 1970  
 (44) Complete Specification published 21 March 1973  
 (51) International Classification B43L 1/00 1/04  
 (52) Index at acceptance  
       B6A 8A  
       B6P M3D



## (54) VISUAL AID TO LEARNING

(71) I, DAVID MALCOLM MCGOLDRICK BEARD, a British Subject, of 19 Green Park Road, Exmouth, Devon, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to visual aids to learning, hereinafter called visual aids. At the present time there are various forms of material which provide backgrounds for visual aids, the most common being the chalkboard (commonly called the black-board). Other forms of background material include, for example, the "magnetic" board on which magnetic characters or data can be displayed, the plastic board for plastigraph and felt for flannelgraph to mention but a few. When the teacher or lecturer wishes to use any one visual aid available to him, it is normal practice to leave one board and use another which has been set up for his use. The object of this invention is to provide more than one visual aid surface in the same piece of equipment.

According to this invention there is provided a visual aid comprising a board of rigid material, a plurality of flexible sheets, and attachment means which means is supported in such a way that there is a transverse elongate aperture, between the means and the board, through which the flexible sheets, attached to or by said means, may be posted to either side of the board as required.

One form of visual aid is illustrated in the accompanying drawing wherein:—

Fig. 1 is a perspective view of the front of the aid with the flexible sheets turned back to show the structure of the aid.

Fig. 2 is a part view of the back of the aid, and

Fig. 3 is a longitudinal section taken through line A-B of Fig. 2 looking in the [Price 25p]

direction of the arrows.

Referring to the drawing, the visual aid comprises a board or backing member 2 made of rigid material for example plywood, three sides of which are mounted in a frame 3 which stand proud of both the front and back surfaces of the board 2. The board 2 bears on its front surface a panel 4 of non-glossy vinyl (preferably light grey or off white in colour) to be used as a marker board surface in conjunction with water-based felt tip markers for example the markers known as Eagle Boardwriters (Registered Trade Mark). Alternatively, or additionally, the panel 4 can be used as a projection screen. Fixed to the rear surface of board 2 is a sheet 6 of ferrous metal plate providing a "magnetic" board. The sheet 6 is painted with a suitable matt finish black substance which will accept chalk. Thus sheet 6 can be used as a chalk board as well as with magnetic characters. An elongate horizontal aperture 8 is provided above the top of the board 2 and four separate flexible sheets 12, 14, 16 and 18 are secured to the top of the frame 3 by means of a hollow bar 10 provided with an open mouthed slot 20. The upper edges of the sheets 12-18 are provided with enlargements or beads 22 by which they can be slidden into the bar 10 from the end and retained therein. The two end portions 24 of the bar are cut back so as to grip the upper end portions of the frame. The bar 10 is removably held to the frame by bolts 26. The four flexible sheets are as follows:—

Sheets 12 and 18 are made of clear film material for example cellulose acetate or polyethylene and provide (a) backgrounds for plastigraph with characters, etc., made of polyvinylchloride and (b) marker board surfaces used in conjunction with certain water-based markers for example fibre-tipped markers known as Staedtler Lumocolor (Registered Trade Mark). It is not

intended that the use of (b) should be as extensive as that of panel 4 but limited to labels, annotations, etc.

Sheet 14 is made of looped nylon fabric for the reception of cut outs backed with areas bearing hooked nylon fabric.

Sheet 16 is made of felt or like rough surface for flannelgraph. The sheets 14 and 16 can be bound with bias binding, ribbon or tape along their free edges to prevent the material fraying. If required, clips (not shown) are provided for holding the free edges of the sheets to the bottom edge portion and/or sides of the board.

In use, if it is desired to use the surface 4 all the flexible sheets 12 to 18 are posted through the aperture 8 and the surface can be used either as a marker board with water-based felt tipped markers or as a projection screen or both in combination. If it is desired to use the "magnetic" or chalk board 6, then the whole visual aid is reversed by turning it back to front and the flexible sheets are all made to lie adjacent to the surface 4. As the clear film sheets 12 and 18 will accept characters written with some water-based felt tipped markers, two of such sheets are provided so that one can lie against the surface 4 or 14 and the other can lie against the surface 6 or 16. Figs. 2 and 3 show the latter condition where the sheet 12 is lying against the surface 14 and the sheet 18 is lying against the surface 6.

It will be noted that, as well as using the various backgrounds singly, several can be used in combination for example the clear film sheet marker board can be used with a chalk or "magnetic" board 6, or with the marker board surface 4, or with the felt surface 16, or with the looped nylon surface 14. In addition, when the sheet 18 is superimposed on the felt sheet 16, which is lying on the "magnetic" board 6, the three media can be used together, that is to say the user can write on the clear film sheet 18 and apply "magnetic" characters to this board which are attracted through the felt 16, which may itself bear flannelgraph applied pieces. The looped nylon sheet 14 can be used in the same way if the looped nylon is on both surfaces of the sheet 14. If the looped nylon is on one surface only, then of course the sheet 14 must be removed from the position shown, reversed and replaced on the board.

The visual aid made according to this invention is not limited as to size. The one described is 12" by 9" and the opening 8 is 7" by 2", but a convenient size for general purposes would be for example 3' by 4'. Sheet attachment means other than those de-

scribed may be substituted for example spring clips and all the flexible sheets and the marker board surface 4 may be of any desired colour and may be arranged in any order and not necessarily in the manner described.

The construction of the board also allows for the insertion of other flexible materials either in addition to or in place of those mentioned, according to the preference of the user.

The board is supported on an easel or if desired it can be hung against a wall by suitable means of for example hooks and eyes or brackets.

In the case where the flannelgraph sheet is used it is desirable to incline the board to ensure that the pieces do not drop off. Accordingly removable distance pieces can be applied to the back of the lower edge of the frame.

#### WHAT I CLAIM IS:—

1. Visual aid comprising a board of rigid material, a plurality of flexible sheets, and attachment means which means is supported in such a way that there is a transverse elongate aperture, between the means and the board, through which the flexible sheets, attached to or by said means, may be posted to either side of the board as required.

2. Visual aid according to claim 1, in which the flexible sheets are removably attached to said attachment means.

3. Visual aid according to claim 1 or 2 wherein the said attachment means are removable with respect to the board.

4. Visual aid according to claim 1, 2 or 3 in which said board bears a visual aid surface on each face.

5. Visual aid according to claim 1, 2, 3 or 4 wherein the flexible sheets include one transparent cellulose acetate sheet.

6. Visual aid according to any one of the preceding claims wherein the attachment means comprises a hollow bar with an open mounted slot and the flexible sheets extending through the slot and one edge of the flexible sheets being retained in the said bar.

7. Visual aid according to any one of the preceding claims wherein the said board is mounted in a frame which stands proud of the front and back surfaces of the said board.

8. Visual aid according to claim 8 wherein the sides of the frame extend upwards beyond the top of the said board.

9. Visual aid according to claim 8 wherein the said hollow bar is removably attached

to the upper end portions of the sides of the frame.

9. Visual aid to learning substantially as described with reference to the accompanying drawing.

MEWBURN ELLIS & CO.,  
Chartered Patent Agents,  
70-72, Chancery Lane,  
London, W.C.2.  
Agents for the Applicant.

---

Printed for Her Majesty's Stationery Office by The Tweeddale Press Ltd., Berwick-upon-Tweed, 1973.  
Published at the Patent Office, 25 Southampton Buildings, London WC2A 1AY from which copies may be obtained.

1,310,357

1 SHEET

COMPLETE SPECIFICATION

This drawing is a reproduction of the Original on a reduced scale.

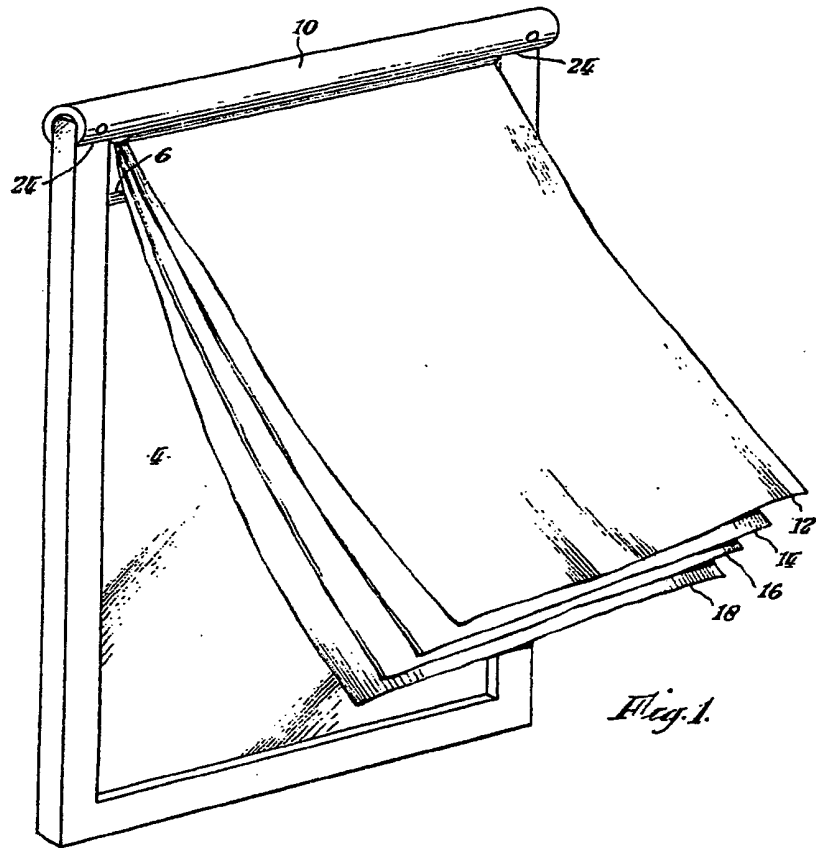


Fig. 1.

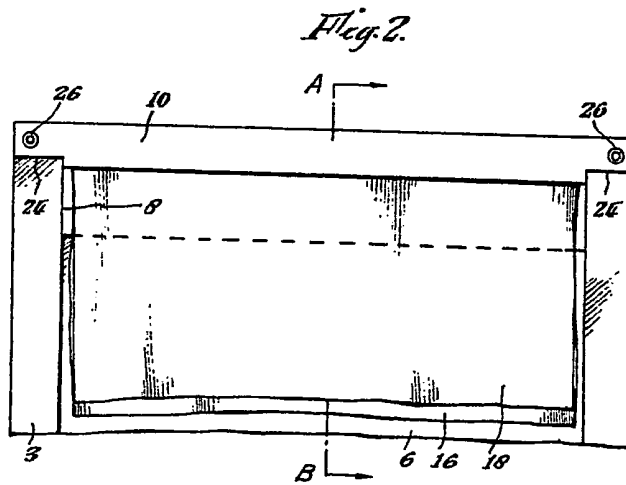


Fig. 2.

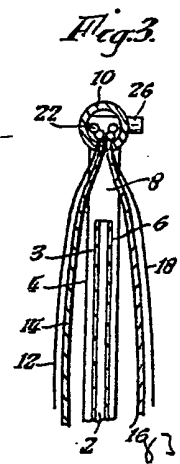


Fig. 3.